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ABSTRACT

Criteria that may be used to assess the quality of individualized education programs (IEPs) for handicapped students are presented, along with nine examples of procedures for recording/displaying pupil performance data, and seven guidelines for modifying instructional programs. After discussing the rationale for IEPs, the following three indices for determining the quality of an IEP are discussed; (1) the assessment instruments and procedures employed to establish a student's current level of educational performance: (2) the specificity of the short term instructional objectives; and (3) the extent to which the IEP is used by the teacher in planning a student's day to day instructional program. Techniques and procedures that can facilitate the tasks of developing and implementing the instructional plan and writing the IEP are summarized as follows: using existing sequences of skills in a variety of curriculum areas, systematic collecting and recording of performance data, changing or modifying the program when the data indicate a change is necessary, and being precise in the use of systematic instructional procedures. Examples of recording/display procedures include: frequency counting, graphing ontask behavior, alternative ways of charting movements per minute by calendar weeks, monitoring skill acquisition for each student using a matrix, an objective sequence worksheet, a reading skills chart, and a chart displaying short term objectives, evaluation procedures, and criteria for each goal area. The guidelines for modifying instructional programs provide seven examples of data that indicate the need for program changes (i.e., instructional or motivational). (SEW)

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GUIDELINES FOR DEVELOPMENT AND IMPLEMENTATION OF QUALITY I.E.P.s

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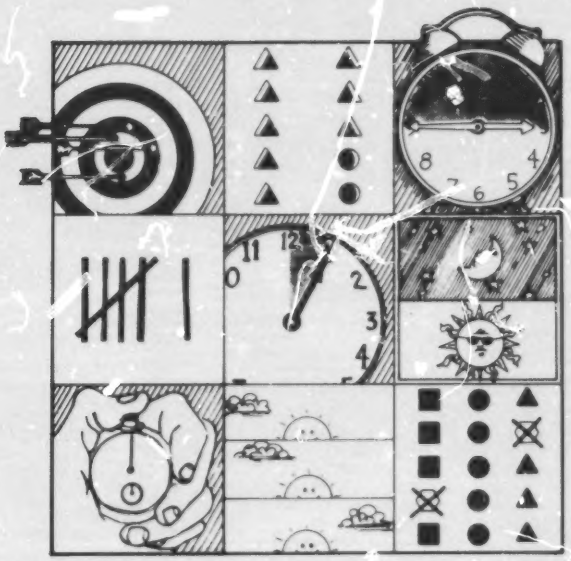

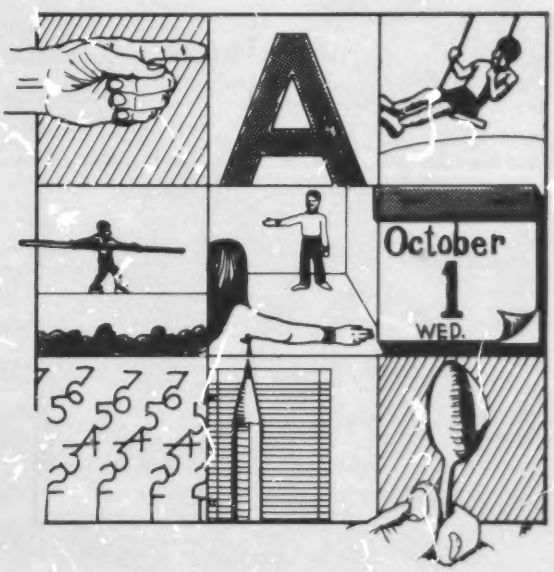

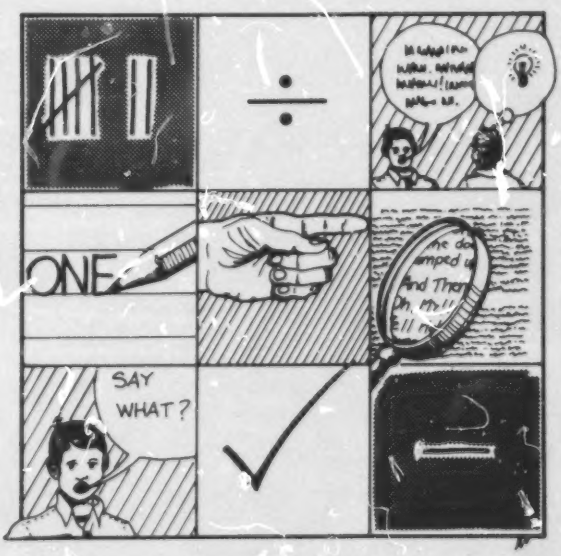

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GUIDELINES FOR DEVELOPMENT AND IMPLEMENTATION OF QUALITY IEPs

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In passing the Education of All Handicapped Children Act, Congress envisioned the development and implementation of Individualized Education Programs, developed with full parental participation, which would positively impact on the educational growth of handicapped children and youth. However, Congress and responsible Federal agencies left unanswered several important questions, one of which was: What is a **good** IEP? The lack of a clearcut answer to this question may be in part responsible for some of the feelings of disillusionment and discouragement which have been experienced by special education teachers and related personnel in recent years (Safer, Morrissey, Kaufman, & Lewis, 1978). The purpose of this paper, therefore, is to suggest and discuss some criteria which may be used to assess the quality of an IEP.

Rationale for IEPs

IEPs may be viewed as serving two purposes: (1) an administrative function, and (2) an instructional function. As an administrative document, the IEP satisfies various local, state and federal legislative or regulatory mandates. It is a type of a contract between an educational agency and a handicapped student and his/her parents which outlines the nature of the special education program to be provided to the student.

From an administrative standpoint, the development of IEPs will help make special education programs more accountable. Past inappropriate practices in special education have been well documented:

- Handicapped children have remained in the same program for years without adequate reevaluation;
- Parents have not been meaningfully involved in educational planning for their children;
- Handicapped children have been evaluated and/or placed in special education programs without parents' permission or knowledge; and
- Handicapped children have been placed in restrictive educational classes or groups, thus being denied individualized planning to meet their needs.

As an instructional procedure, on the other hand, the IEP emphasizes that handicapped children differ from each other in terms of their needs, capabilities, and receptivity to alternative instructional methods. It is known that handicapped learners require carefully planned and appropriately sequenced instructional programs for learning to occur. By specifying instructional goals and objectives based on the learner's current levels of educational performance and by regularly monitoring the learner's progress utilizing specific evaluation criteria, the probability of successful intervention with handicapped children substantially increases (Haring & Eaton, 1978).

But is the IEP, then, an **administrative document** or an **instructional procedure**? The Office of Special Education and Rehabilitative Services/Division of Assistance to States recently published a "Final Draft Policy Paper on Individualized Education Programs" (DAS Information Bulletin #64, May 23, 1980). A major purpose of this paper was to clarify what requirements must be met in order for public agencies to be in compliance with the IEP provisions of P.L. 94-142 and its regulations. According to OSE, the overall IEP requirement has a number of purposes and functions:

1. The IEP meeting serves as a communication vehicle between parents and school personnel, and enables them, as equal participants, to jointly decide upon what the child's needs are, what will be provided, and what the anticipated outcomes may be.
2. The IEP itself serves as the focal point for resolving any differences between the parents and the school; first through the meeting and second if necessary, through the procedural protections that are available to the parents.
3. The IEP sets forth in writing a commitment of resources necessary to enable a handicapped child to receive needed special education and related services.
4. The IEP is a management tool that is used to insure that each handicapped child is provided special education and related services appropriate to his/her special learning needs.

5. The IEP is a compliance/monitoring document which may be used by monitoring personnel from each governmental level to determine whether a handicapped child is actually receiving the free appropriate public education agreed to by the parents and the school.
6. The IEP serves as an evaluation device for use in determining the extent of the child's progress toward meeting the projected outcomes. (p. 3)

Thus, according to the OSE paper, it is not the intent of the Federal Government to require schools to develop IEPs which are used to plan, on a daily basis, the specific instructional program to be provided to handicapped students. However, the policy paper goes on to state that, while from a Federal compliance standpoint, "the IEP is not intended to be detailed enough to be used as an instructional plan" (p. 23), the IEP

> (1) sets the general direction to be taken by 'IEP implementers' in working with a child, and (2) *serves as the basis for developing a detailed instructional plan for the child*. (p. 23)

The positions to be taken in this paper, we believe, are reasonably consistent with current Federal policy. We believe that it is not the *development* of IEPs which leads to good teaching (i.e., the administrative/management function); it is the *systematic* implementation through the instructional plan, which enhances the educational growth of handicapped students. In short, IEPs are a "best practice" when they are used to directly influence the daily instructional program received by handicapped students.

Indices of Quality

There are three factors which determine the quality of an IEP:

(1) The assessment instruments and procedures employed to establish a student's current level of educational performance;
(2) The specificity of the short-term instructional objectives; and
(3) The extent to which the IEP is used by the teacher in planning a student's day-to-day instructional program.

The assessment

The assessment of a student's current level of educational performance accomplishes two purposes. First, assessment information determines a student's eligibility for a special education program, often by classifying the student as learning disabled, hearing impaired, emotionally disturbed, mentally retarded, or some other category of exceptionality. Secondly, assessment information provides the basis for developing annual goals and short-term instructional objectives by identifying starting points for instruction based on the student's current level of performance.

Both purposes are equally important. In many states, the "entrance requirements" for special education programs are solely determined from the results of a battery of standardized, norm-referenced tests; e.g., an intelligence test, an achievement test, a test of perceptual-motor functioning, a developmental scale, a behavior problem checklist. While this kind of information is probably adequate for placement purposes, most norm-referenced assessment procedures are too imprecise to be of value in instructional programming primarily because norm-referenced tests only assess a relatively small sample of the skills involved in a particular area of educational performance. At best, results from norm-referenced procedures only provide an **estimate** of a student's current level of educational performance (Salvia & Ysseldyke, 1978).

On the other hand, if assessment information consists solely of results from criterion-referenced and/or teacher-made informal inventories, the chances increase that an accurate judgment about the presence or absence of a handicapping condition cannot be made. Norm-referenced assessment procedures allow comparisons to be made between the student who was tested and others like him/her who had been tested with the same instrument; most criterion-referenced assessment procedures do not allow such comparisons to be made. Simply put, norm-referenced assessment

instruments usually provide the necessary information to make accurate eligibility decisions, and criterion-referenced assessment procedures provide the information necessary to make accurate instructional programming decisions (Wallace & Larsen, 1978).

As a best practice, in assessing a student's current level of educational performance for instructional programming purposes, the teacher and the rest of the team

should describe the student's performance; i.e., how well the student can perform certain tasks in terms of rate and accuracy.

Example:
"Reads c-v-c words, 38C/0 Errors per minute"; "computes single-digit problems, 19C/0 Errors per minute".

should list specific skills the child has acquired or has yet to acquire

Example:
"Can add 2 place problems (no carrying)", "Cannot count by 2s, 5s, or 10s" or "on-task 32% of the time".

should list the child's strengths as well as weaknesses.

Example:
"Enjoys art activities, which he can do quite well", or "Participates appropriately in classroom discussions".

should not include labels or other idiomatic jargon in describing the child.

Example:
"Is hyperactive", "Borderline range of intelligence", "Brain-damaged", or "Passive-aggressive personality disorder".

should not list test scores only.

Example:
"Overall achievement = 2.2", "WISC-R Full Scale: 86", or "Psycholinguistic Age = 7-6".

should avoid vague generalities which may be variously interpreted by different individuals.

Example:
"Appears to be emotionally disturbed", "Particularly inattentive", "Avoids work", or "Limited language skills".

The contribution of the assessment process to the development of a quality IEP cannot be stressed too strongly. It is important to remember that the main reason for assessing children is to be able to make better decisions about the character and direction of each child's instructional program (Salvia & Ysseldyke, 1978). It is a waste of time and energy if the team merely uses the assessment information to justify a placement or a label, or if test scores takes primacy over other types of information offered by the assessment. Without precise, reliable, and valid assessment information, the team will find it difficult to develop a quality IEP.

Specificity of the Short-Term Objectives

One of the early proponents of instructional objectives for education, Robert Mager, succinctly summarized the rationale for instructional objectives when he said, "If we don't know where we're going, we might end up someplace else" (Mager, 1962). As subsequent experience has demonstrated, without short-term instructional objectives, instruction often tends to be poorly directed and student learning very difficult to assess.

Traditionally, educators have been told that instructional objectives have three components:

1. A **behavior** the learner will perform to demonstrate skill acquisition. A behavior should be measurable and observable; e.g., it can be counted, has

movement, and has a start and a stop. For example, behaviors such as "compute", kick", "say", "check", "point" are observable and measurable; on the other hand, "know", "understand", "appreciate" are examples of behaviors which are not observable or measurable.

2. The **conditions** under which the student's performance of the behavior will occur. Statements such as "given a list of short 'a' words" or "during a 10 minute period on the playground", describe situations in which the student will demonstrate a particular behavior.
3. The **criteria**, or a statement of the standards by which a student's performance will be measured and evaluated. "With 80% accuracy", "with a maximum of 2 errors", "25 responses per minute" are all sample criteria statements.

The relationship between objectives which state specific criteria, conditions, and behavior and the mandated contents of an IEP is very similar. According to Public Law 94-142, each IEP must include (a) short-term objectives, stated in instructional terms, which are intermediate steps leading to mastery of the annual goals, and (b) evaluation procedures and schedules for determining mastery of short-term procedures and schedules for determining mastery of short-term objectives at least on an annual basis.

Confusion sometimes occurs over the distinction between annual goals and short-term instructional objectives. The distinction becomes clearer when we remember that annual goals are broad, general statements of anticipated outcomes (or growth) the student will be expected to achieve in a single year (Turnbull, Strickland, & Brantley, 1978). Annual goals, therefore, do not require a statement of the criteria for determining mastery. Thus, "can add single-digit addition facts", "can say consonant sounds", "can dress self", "can follow classroom rules" would all be appropriate annual goal statements. Short-term objectives are "developed based on a logical breakdown of the major components of the annual goals and...can serve as 'milestones' for indicating progress toward meeting the goals (DAS Information Bulletin #64, p. 22)". Regardless of whether the IEP is written with "benchmark" short-term objectives or a detailed sequence of short-term objectives, much more specificity is required of the objectives than of the annual goals.

To be "in compliance" and to be "on-target" are, unfortunately, not always the same thing as far as short-term objectives are concerned. It is possible to write objectives which contain a behavior, criteria, and condition statement but still do not meet the test of specificity (i.e., are they measurable and observable?). Table 1 presents several examples of short-term objectives which contain flaws. By way of comparison, Table 2 presents several examples of objectives which meet the criteria for specificity. The problem which often arises in practice is that either sets of examples would probably be judged "in compliance" when, in fact, only the latter set would be useful to the teacher in planning, delivering, and evaluating instruction.

The Ultimate Criterion: Is the IEP Used?

Many workshops and many handbooks have been written which have described, sometimes in great detail, the process of **developing** the IEP as a document. The emphasis on the development process has been and continues to be needed. However, without at least an equivalent emphasis on the **implementation** of the IEP—that is, how the IEP should and can be used as a guide for directing and monitoring the student's instructional program—the teacher may be left with the impression that the IEP is, in fact, only an administrative form to be filed away once it has been completed.

It seems clear that the IEP should be, first and foremost a guide to facilitate the planning, delivery, and evaluation of instruction to handicapped children. Although an IEP does serve a recordkeeping function for administrative purposes, teachers should not file IEPs away in some remote office or file cabinet. Whether it is called an "instructional plan", an "implementation plan", or a "lesson plan" is not important. What is important is the recognition that ***when teachers do not utilize the IEP on a continuous, systematic basis for instructional***

planning, instructional delivery or instructional evaluation, the spirit—if not the letter—of Public Law 94-142 has been ignored.

It needs to be emphasized again and again that, ultimately, the time spent in developing and implementing IEPs will be time well spent because more effective and efficient instruction should result. One of the major criticisms leveled against IEPs, however, relates to the seemingly inordinate amounts of time spent in planning and writing IEPs when contrasted to the time spent in actual teaching (Morgan & Rhode, 1980; Price & Goodman, 1980). This criticism fails to account for the fact that exceptional learners require carefully planned, appropriately sequences, and systemically presented and monitored instructional programs for successful learning to occur.

Table 1
Flawed Objectives

Objective	Flaw
1. The student will say the sounds /f/, /d/, /m/, /g/ at a rate of 60 per minute with 0 errors for 2 consecutive days.	1. What is the stimulus for saying the sounds? From memory, a book, flashcards?
2. The student will sit at his desk with 65% accuracy for 4 days.	2. An inappropriate criterion has been selected. Duration or per cent of time engaged in the desired behavior (i.e., desk sitting) would be more appropriate criteria.
3. The student will identify multiplication fact answers (factors 0-9) at a rate of 50 per minute with 0 errors for 3 consecutive days.	3. How will the student "identify" the correct answers?
4. The student will write answers to multiplication facts (factors 0-9) on a probe sheet at a rate of 50 per minute with 0 errors.	4. This objective implies that the first time the student's performance matches the objective's criteria that the skill has been mastered. Once is not enough; skill acquisition should be demonstrated and maintained over several spaced trials.
5. The student will increase his sense of responsibility for his school work by 50%.	5. What is the yardstick by which "sense of responsibility" can be assessed? In fact, just what is "sense of responsibility?"

Table 2
Specific Short-term Instructional Objectives

1. The student will raise his hand before speaking with no more than 5 talk outs per week and maintain at same level.
2. The student will say 50 CVC words at a correct rate of 50 words per minute with fewer than 3 errors, when the words are presented on a worksheet.
3. The student will pick up a glass filled nearly to the top with milk, drink the contents without spilling a drop, and place the glass back on the table on three consecutive trials.
4. The student will be able to tell time to the half hour with 100% accuracy when shown ten different clock settings for 3 consecutive days.
5. The student will add two one-digit numerals (sums less than 19) at a correct rate of 30 per minute with no more than 2 errors when the problems are presented on a worksheet.

IEP Facilitators

It can be and it has been argued that the time and effort required to **write** IEPs is contributing greatly to teacher "burnout" and higher attrition rates from the field of special education (Shaw, Bensky, Dixon, & Bonneau, 1979). This is an unfortunate development, especially when there are techniques and procedures available which can facilitate the tasks of writing the IEP, developing the detailed instructional plan, and implementing both of them much more efficiently and effectively. Several of the more promising techniques and procedures are briefly summarized below:

1. **Existing sequences of skills in a variety of curriculum areas.**

   A well-developed, and carefully task analyzed sequence of skills provides the roadmap which allows the teacher to know what and, in many cases, when to teach the student a particular skill. Many commercially prepared instructional programs are now available which routinely include elaborate scope and sequence charts or task hierarchies and materials which make it easier for the teacher to teach from an objective-based approach (Turnbull, Strickland, & Brantley, 1979). The major advantage of a pre-developed sequence is that the teacher, after a careful assessment of the student's current level of functioning, can "plug" the student into the appropriate place in the skill sequence. Much time can be saved when a teacher can ***select*** an objective instead of ***writing*** a new objective from scratch.

   Pre-developed skill sequences should not be viewed as a panacea, however. Not all sequences are created equal. For example, there are countless sequences in the area of reading, none of which are identical and most of which vary greatly in terms of quality. A basic rule to follow is to never "blindly" adopt a sequence without first carefully examining the nature and arrangement of the objectives. That there are as many different sequences as there are instructional programs is strong testimony to the disagreements in various curriculum areas regarding what tasks constitute acquisition and mastery of a particular skill. The astute teacher should be alert to these concerns. Most of us would not buy a used car without first kicking the tires and checking the engine; the same caution should be applied in adopting a curriculum skill sequence. If, after "shopping around", you fail to find a program which measures up to acceptable standards, either adapt an existing program or develop your own (Affleck, Lowenbraun, & Archer, 1980).

2. **Systematic collection and recording of performance data.**

   To provide information which will indicate the progress of a student in a particular skill area, an evaluation and measurement system must be established which will accurately reflect pupil progress and display information to teachers, students, and parents in a clear and understandable manner. Systematic and continuous evaluation of student progress represents perhaps the most important guarantee to the overall success of the IEP (Larsen & Poplin, 1980). Perhaps the most important consideration for teachers to keep in mind when monitoring and evaluating student performance is that the systematic assessment and recording of student progress need not be viewed as being isolated and separated from instruction (Hofmeister, 1975). On the contrary, the teacher could adopt the attitude that everything the student does in an educational setting can be considered assessment data. Everytime a teacher asks a student to read, to compute arithmetic problems, to throw a ball, to sit down, the teacher is, in effect, "testing" the student.

   The task for the teacher is to discover and utilize a procedure which facilitates the formal recording of student performance data in a systematic fashion and on a continuous basis.

There are a variety of procedures available to assist the teacher in recording and displaying pupil performance data: (a) graphs, (b) charts or matrices, (c) work samples and anecdotal records, and (d) the IEP form itself. Examples of each of these procedures may be found in Appendix **A**.

3. **Changing or modifying the program when the data indicate a change is necessary.**

The main reason for collecting pupil performance data is to be able to determine, as precisely as possible, whether or not instructional programs (techniques and/or materials) are effective for individual students (Deno & Mirkin, 1980). If data indicate no progress, unusually slow progress, or even a drop in performance, a teacher should follow the "DO SOMETHING" rule. That is, some or all of the existing instructional program should be altered since the data indicate the program is not likely to achieve the desired results. Therefore, the teacher should DO SOMETHING—change the materials, change the reinforcement, change the setting, even change the objective.

The DO SOMETHING rule does not imply a willy-nilly, seat-of-the-pants approach to program modification (See Appendix B). Hopefully, the teacher will carefully analyze the data, searching for clues which are suggestive of the current program's inadequacies and make appropriate adjustments. Whatever modification is made, the systematic collection of performance data must continue because, if the data continue to indicate a lack of satisfactory progress, the teacher will need to DO SOMETHING again.

Consider the following analogy: In hospitals not too many years ago, it was standard practice to hang the patient's chart on the end of his bed. Every once in a while, a doctor or a nurse would check the patient's vital signs, temperature, and look for other symptoms. The doctor or the nurse would carefully record the results of their "probe" or "examination" on the patient's chart and make a judgment about the patient's progress. If progress was satisfactory, they continued the treatment; if not, they DID SOMETHING—that is, they modified the treatment and, in some cases, may even have ordered additional diagnostic tests.

Perhaps, it is time special educators began to view the IEP from a similar perspective. The IEP can be a chart which can be placed on or near the student's work station. The teacher could regularly observe or probe the student to sample skill acquisition to evaluate progress. And, as in the previous example, if a student demonstrated satisfactory progress, the teacher would continue the treatment. If not, the teacher would DO SOMETHING to change the "remedy".

4. **Teacher willingness and readiness to be precise.**

Ever since the instructional objectives movement began in earnest in the 1960's, there have been more than a few teachers who have resisted the notion that what they were teaching needed to be written in terms of instructional objectives (let alone systematically monitored). "I don't need to write instructional objectives—I have them in my head" or "Instructional objectives inhibit incidental learning or stifle creativity and spontaneity" are comments that have been and continue to be heard from teachers. This type of thinking fails to recognize the fact that instruction without objectives often tends to be poorly formulated, disorganized, impossible to objectively evaluate, and simply not as effective in terms of student learning. This is not hearsay evidence, but is based on years of research with non-handicapped and handicapped learners and their teachers (White & Haring, 1980).

It is difficult to determine whether skepticism, lethargy, or lack of knowledge/skill contribute to a teacher's failure to employ systematic instructional procedures. Lack of knowledge and skill can be addressed through additional training and supervision. Lethargy, however, is a problem with which even the best inservice program may be unable to deal. Perhaps the best alternative to deal with teacher lethargy is through peer pressure and/or systematic cultivation (i.e., "weeding out") within the teaching profession.

The Spirit of the Law

To be in "paper compliance" with IEP requirements—that is, complying with the ***letter*** of the law—is a relatively easy task (Walker & Kuhic, 1979). Most current state and federal program auditing and review practices emphasize a "yes/no" approach to evaluating IEPs. That is, if the IEP has been written, if the various sections of the IEP have "stuff" in the appropriate places, the program auditor/reviewer may very likely say, "Yes, this IEP is in compliance". Whether the program auditor/reviewer makes a judgment about the instructional quality or soundness of the "stuff" contained in the IEP depends on the background and orientation of the individual.

Thus, proper execution of the administrative function assures compliance with the ***letter*** of Public Law 94-142. Proper execution of the instructional function assures compliance with both the ***letter*** and ***spirit*** of Public Law 94-142. In other words, handicapped children are entitled to receive a free and appropriate educational program commensurate with their unique needs, and the best way to ensure that the educational program is appropriate is to systematically develop, implement, monitor, and evaluate the IEP.

Admittedly, to be in compliance with the spirit of the law requires dedication, time, energy, and skill. These are, however, the characteristics often ascribed to teachers of handicapped children. To bow before the letter of the law while violating its spirit does a grave disservice to the children and youth for whom P.L. 94-142 was written and to whom special education teachers have committed themselves.

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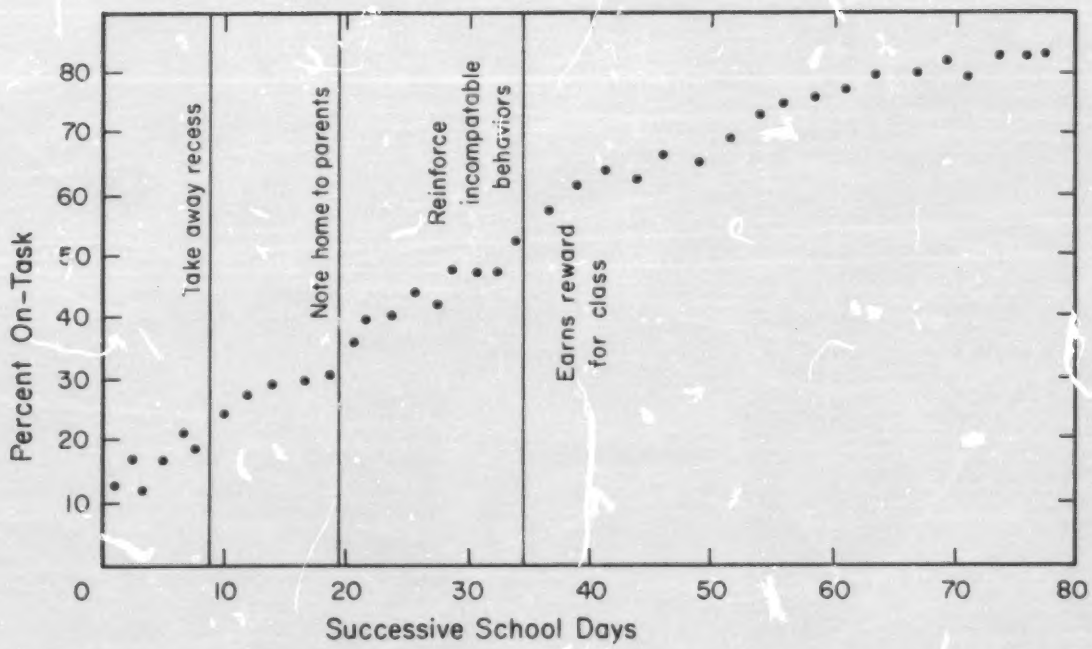
Appendix A

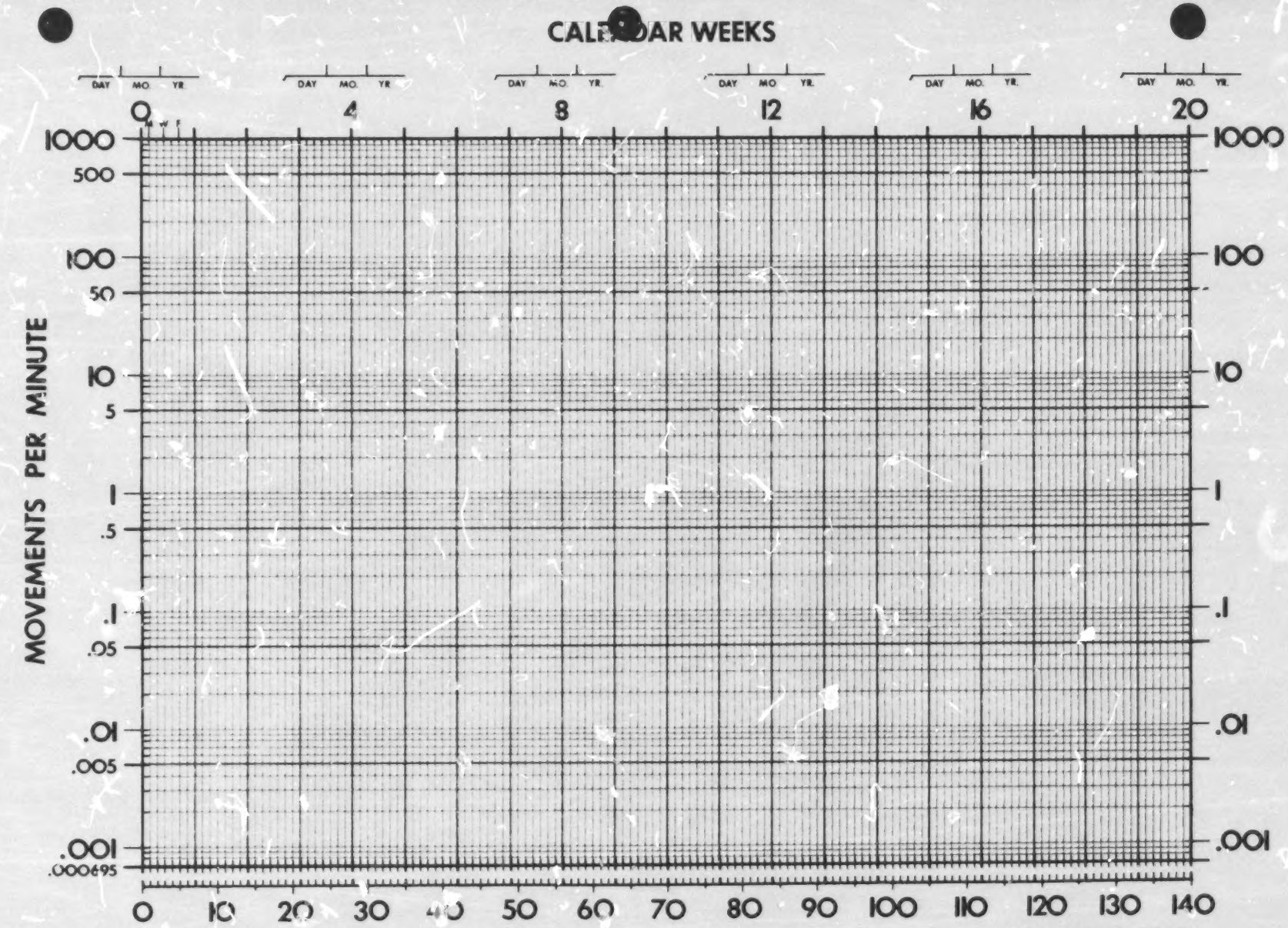
Examples of Procedures to Assist Teachers in Recording and Displaying Pupil Performance Data.

FREQUENCY COUNTING

Date	Temper Tantrums
10/2	////////////
10/3	////////////
10/4	////////////
10/5	////////
10/6	////////////
10/9	//////
10/10	//

Graphing On-Task Behavior





PROJECT TEAM

SUPERVISOR _____ BEHAVER _____

ADVISOR _____ AGE ___ LABEL _____ MANAGER _____

COUNTER _____ CHARTER _____ NOTES _____

MOVEMENT CYCLE

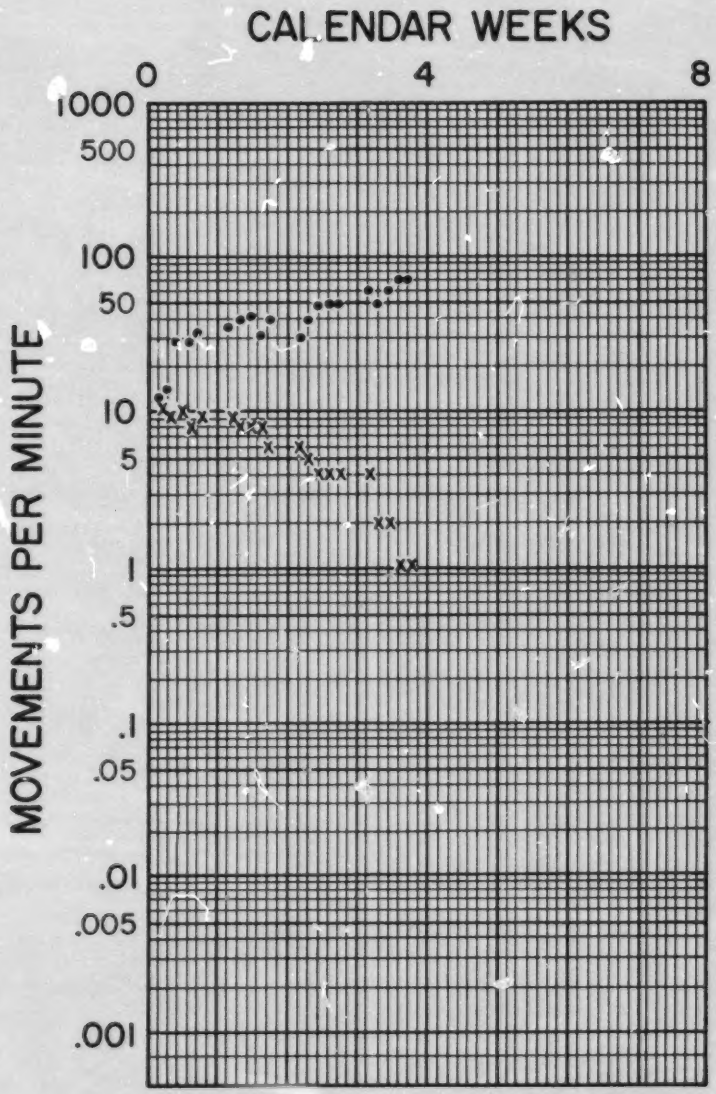
NAME IT _____

COUNT WHEN _____

_____ OCCURS

Pupil's Name JOHN

Consecutive Week days	9/14	9/15	9/16	9/17	9/18	9/21	9/22	9/23	9/24	9/25	9/28	9/29	9/30	10/1	10/2	10/5	10/6	10/7
READS NUMBERS																		
0	+	+	●	+	+	+	+	+										
1	+	+	+	+	+	+	+	+										
2	+	+	+	+	+	+	+	-										
3	●	●	+	●	●	●	+	+										
4	+	+	●	+	+	●	+	+										
5	+	+	+	+	+	+	+	+										
6	●	●	●	+	●	●	●	+										
7	+	●	+	+	●	+	+	+										
8	+	+	+	+	+	+	+	+										
9	●	●	●	●	+	●	●	●										
COUNTS ORALLY 0-15	●	●	+	+	●	●	+	●										
WRITES 0-9 (sequentially)	●	●	●	●	●	●	●	+										


CALENDAR WEEKS
0
4
8
MOVEMENTS PER MINUTE
1000
500
100
50
10
5
1
.5
.1
.05
.01
.005
.001

	Billy	Jane	Sally	Melissa	Andy	Bobby	Jeannie	Tommy	Mary	Danny	Carol	Richard	Janet	Phillip	Susan
Sorts Colors	+	●	+	●	+	+	+	+	●	●	+	+	+	●	+
Identifies Colors (Names)	+	●	+	●	+	+	+	+	●	●	+	+	+	●	+
Cuts with Scissors on line	+	●	+	●	+	●	●	+	●	●	+	+	+	●	+
Colors within Boundary	+	●	+	●	+	●	●	+	+	●	●	+	+	●	●
Sorts Shapes	●	+	+	●	+	●	+	+	+	●	●	+	+	+	●
Identifies (names) Shapes	+	+	+	●	+	●	+	+	+	●	+	+	+	+	●
Draws Shapes from Dictation	●	+	+	●	+	●	●	+	+	●	●	+	+	+	●
Traces Letters	+	●	+	●	+	●	+	+	+	●	+	+	+	●	●
Copies Letters	+	●	+	●	+	●	+	+	+	●	+	+	+	●	●
Says Letters Names-Capitals	●	+	+	●	+	●	+	+	+	●	●	+	+	●	●
Writes Letters-Capitals	●	●	+	●	+	●	●	+	●	●	●	+	+	●	●
Says Letter Names-Small	●	+	+	●	+	●	●	+	+	●	●	+	+	●	●
Writes Letters-Small	●	●	+	●	+	●	●	+	●	●	●	+	+	●	●
Reads Numerals 0-9	+	+	+	●	+	●	+	+	+	●	●	+	+	+	●
Counts Orally 0-15	+	●	+	●	+	●	●	●	+	+	●	+	+	+	+
Writes Numerals 0-9(memory)	+	●	+	●	+	+	●	●	+	●	●	+	+	+	●
Labels (written) sets 0-9	●	●	+	●	+	+	●	●	●	●	●	+	●	●	●

A GROUP MATRIX FOR MONITORING ACQUISITION OF PRE-ACADEMIC SKILLS

OBJECTIVE SEQUENCE WORSHEET

STUDENT:_____ SUBJECT AREA_____

Long Term Goal:

CONDITIONS	OBSERVABLE BEHAVIOR	STANDARD CRITERION	PREDICTED MASTERY DATE	MASTERY DATE
In sequence from Memory	Writes digits	50 correct/0 error per min.	9-12	9-15
Given set recognition sheet, 0-3	Writes digits	40 correct/0 error per I min.	9-18	9-17
Given set recognition Sheet, 0-5	Writes digits	40 correct/0 error per I min.	9-23	9-22
Given set recognition Sheet, 0-10	Writes digits	40 correct/0 error per I min.	9-27	9-28
Addition Facts $\frac{n}{+n}$ 0-1	Writes digits	30 correct/0 error	10-5	10-4
Addition Facts $\frac{n}{+n}$ 0-2	Writes digits	30 correct/0 error	10-12	10-15
Addition Facts $\frac{n}{+n}$ 0-3	Writes digits	30 correct/0 error.	10-21	10-25
Addition Facts $\frac{n}{+n}$ 0-5	Writes digits	30 correct/0 error	10-29	10-29
Addition Facts $\frac{n}{+n}$ 0-8	Writes digits	30 correct/0 error	11-5	11-7
Addition Facts $\frac{n}{+n}$ 0-10	Writes digits	30 correct/0 error	11-18	11-21

SKILLS CHART - READING

SKILL	CRITERIA	/ = doesn't know X = known 9/2 = date learned
1. symbol matching		
2. match 2 letters to 2 letters		
3. larger word matching		
4. say letters in order	60/min.	
5. say letter names -- CAPS	50/min.	
6. say letter names - small	50/min.	
7. write letters - Caps	28/min.	
8. write letters - small	28/min.	
9. hear-to-write Caps		
10. hear-to-write small		
11. say consonant sounds	50/min.	
12. say short vowel sounds	50/min.	
13. circle letter in words	52/min.	
14. circle words in a sentence	50/min.	
15. circle sentences	15/min.	
16. say cvc words - a	20/min.	
17. " " " - e	20/min.	
18. " " " - i	20/min.	
19. " " " - o	20/min.	
20. " " " - u	20/min.	
21. " " " - mixed vowels	20/min.	
22. say words - sight voc. (Dolch) PP	20/min.	
23. " " " (Dolch) P	20/min.	
24. " " " (Dolch) I	20/min.	
25. say consonant blends	40/min.	
26. say consonant digraphs	40/min.	
27. say cons. blends & digraphs	40/min.	
28. say ccvc words, short a	20/min.	
29. " " " short e	20/min.	
30. " " " short i	20/min.	
31. " " " short o	20/min.	
32. " " " short u	20/min.	
33. " " " mixed vowels	20/min.	
34. say ccvc words, mixed vowels	20/min.	
35. say ccvc words, long vowel a	20/min.	
36. " " " long vowel i	20/min.	
37. " " " long vowel o	20/min.	
38. " " " long vowel u	20/min.	
39. " " " mixed long vowels	20/min.	
40. say vowel blends	40/min.	
41. say cvvc words - a (a, ay, ai)	20/min.	
42. " " " - e (e, ee, ea)	20/min.	
43. " " " - i (i)	20/min.	
44. " " " - o (o, oa)	20/min.	
45. say words with long vowel combin.	20/min.	
46. say vowel blends (teams)	40/min.	
47. say words with vowel teams	20/min.	
48. say words, r-controlled vowels	20/min.	
49. say words, short, long r-contr.	20/min.	
50. say multi-syllable words		
51. say contractions	16/min.	
52. say words with prefixes		
53. say words with suffixes		
54. say words with endings		
Add words from the child's reading book.		

GOAL: *Follow classroom rules (decrease acting-out behaviors)*

SHORT-TERM OBJECTIVES	EVALUATION PROCEDURES	CRITERIA	DATE MONITORED
1. *Talk in a moderate tone of voice.* 2. *Follow teacher's instructions.* 3. *Remain in seat except when school work requires being out of seat.* 4. *Talk, work, and play at proper times with classmates.* 5. *Attend to teacher and/or work.*	*These behaviors should be evaluated simultaneously. That is, the student should be expected to follow all the classroom rules, not just several. The best way to evaluate these objectives is through observation--either duration data or time sampling:* a. *Duration data: Three or four times per week the teacher should observe the students for approximately 15 minutes using a stopwatch. The stopwatch should run as long as the student is following all the classroom rules simultaneously. As soon as the student breaks one of the rules, the watch should be stopped.* *Record the "start" time and the "stop" time to determine the total minutes observed. Divide the accumulated time on the stop watch by the total minutes observed to calculate total % of rule-following behavior.* b. *Time-sampling: Use a device which can be set to sound a signal on an intermittent basis; e.g., kitchen timer, tape recorder. When the signal sounds, record whether the student is following all the rules as once. In the initial stages of the program, set the signal to sound 5 or 6 times per hour.*	a. *Duration* *80% of the total time observed, the student should follow the rules.* b. *Time Sampling* *80% of the intervals observed, the student should have been following the rules.* *Note: The teacher should also keep a frequency count of the following behaviors: (1) hurting or attempting to hurt another person, (2) destroying or stealing property, and (3) continual disobedience of teacher.*	

19

23

24

GOAL: *Improve adademic survival skills*

SHORT-TERM OBJECTIVES	EVALUATION PROCEDURES	CRITERIA	DATE MONITORED
1. *The student will look at, watch, or view teacher-presented tasks, teacher presentations, and other teacher approved tasks.*	*At least two times weekly, the teacher will use a stopwatch to obtain duration observation data in the classroom. The teacher will select two 10 minute periods during which s/he will carefully track the behavior of the target child. The teahcer should be able to teach other students during these times while keeping "one eye" on the target student. Data should be plotted on a graph, which should be attached to this form.*	*Increase to 80% of the time observed and maintain at that level for six weeks.*	
2. *The student will work (writing,) reading, drawing, painting, etc.) on teacher-assigned or approved tasks.*			
3. *The student will volunteer information related to academic or management matters either verbally or by raising hand.*	*The teacher will keep a frequency count of the number of times the student "volunteered" during class. This may best be accomplished by taping a 3 x 5 card to the student's desk; either the teacher or the student (at the request of the teacher) will make a mark immediately following each occurence of the behavior.*	*The desired frequency of "volunteering" is difficult to estimate. Further, the actual frequency will be determined by the amount of time the student spends in the classroom. However, let the following estimates serve as a guide:* *Resource (1/2 hr. - w hrs./day) - 8 wks* *Part-time (3-4 hrs/day) - 12/wks.* *Self-contained (r or more hrs./day)- 15/wks.*	
4. *The student will follow teacher directions, instructions, or commands.*	*Typically, teachers give many instructions to students in the normal course of classroom activites--too many, perhaps to keep track of an individual student's rate of compliance. Therefore, for this objective, the teacher should do two things to monitor student progress: (1) keep regular anecdotal records regarding student performance; (2) Give the student approximately two or three "tests" each day. Ask/tell the student to do something and record his response.*	*The students should comply with teacher instructions 100% of the time within 3 seconds.*	
5. *The students will remain seated during assigned deskwork periods.*	*If the student's out-of-seats are short duration excursions, use a frequency occurrence. If the out-of-seats are for long durations, use a stopwatch and observe as in procedures established for STO #1 & #2.*	*No more than 5 out-of-seats per week and maintain at the level.*	

GOAL: *Improve peer social interaction skills/decrease socially negative/aggressive behaviors.*

SHORT-TERM OBJECTIVES	EVALUATION PROCEDURES	CRITERIA	DATE MONITORED
1. *Be polite and cooperative.* 2. *Talk politely* 3. *Be helpful and considerate of others.* 4. *Wait for your turn.* 5. *Cooperate with your classmates.* 6. *Ask permission before borrowing.*	*The primary method of evaluation for each of the objectives is observation. The observation can be done on several levels:* *(a) In a contrived role-playing or behavioral rehearsal situation.* *(b) In actual social contexts.* *The teacher should use the objectives as a checklist to rate the student's performance on each of the behaviors as:* 1. *consistently demonstrated* 2. *inconsistently demonstrated* 3. *not demonstrated at all*	*The desired level of performance is for the student to demonstrate each of these behaviors consistently over an extended period of time.* *Note: The teacher should also record the frequency of each occurence of the following behaviors:* *1) Bossing or pestering others* *2) Taking others' things without asking* *3) Grabbing things away from others* *4) Hitting, shoving, pushing, or hurting others.* *The rate of occurence of these benaviors should decrease to near zero as the positive behaviors increase in consistency.*	

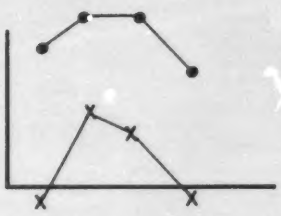
Appendix B

Guidelines for Modifying
Instructional Programs

(Reprinted with the permission of Idaho State Department of Education from: **What's Going on Here? A Collection of Exceptional Practices in Idaho**, 1977.

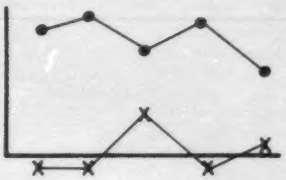
Analyzing daily data gives lots of information on not only <u>when</u> to make program changes, but <u>what kinds</u> of changes to make. When a program "isn't working", make either an instructional change (altering the type, amount or style of instruction), or a motivational change (altering contingencies, consequences, reinforcers). Using data to figure out what kinds of change to make really helps when you run into unsuccessful programs.

1.



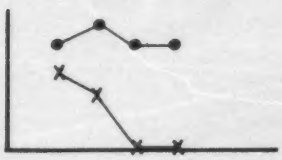
Review data pattern: If you see high corrects and high errors on some days, and lower corrects and lower errors on other days . . . you know the student can do the task accurately when working slowly, but makes errors when hurrying. Try an INSTRUCTIONAL CHANGE. Increase student accuracy by working for mastery of the error items. At the same time give the student some experience with higher rates by practicing on correct items.

2.



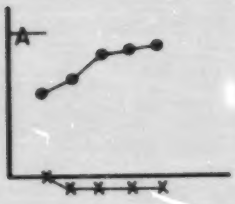
If you see high corrects and low errors on the same day . . . you know the student can do the task, but sometimes chooses not to. Try a MOTIVATIONAL CHANGE. Increase or change the reinforcers you're using.

3.



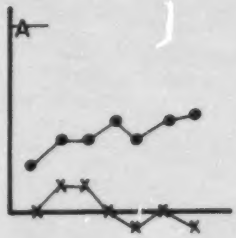
If you see plateauing corrects, and gradual decelerating errors . . . maybe the student is concentrating on correcting errors. Try an INSTRUCTIONAL CHANGE. Teach the student correct responses by giving extra practice on errors.

4.



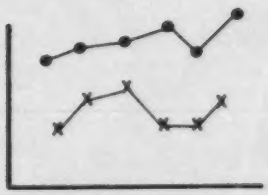
If you see gradual increasing corrects ending in a plateau . . . look at the last high rate. If it is near the desired aim, the student may be bored with the task. Try a MOTIVATIONAL CHANGE.

5.



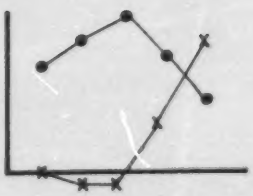
If that last high is near the desired aim, but relatively low, check to see if the student knows anymore correct answers, or if the student has any experience with faster rates. No? Then try an INSTRUCTIONAL CHANGE

6.



If you see errors plateauing at a high rate (3+) . . . you know the learner does not know the correct answer to specific items. Try an INSTRUCTIONAL CHANGE. Identify the errors, and teach directly toward mastery of those items.

7.



If you see declining corrects and/or increasing errors . . . .student performance is getting worse, but you have seen evidence of good performance. Try a MOTIVATIONAL CHANGE. Check yourself, have you followed through on the contingencies established?

REMEMBER:

If you try an instructional change, and it doesn't work, don't be disappointed. Try again. Re-examine the data, and consider making a different change.